## Palmer's Ring in GEANT

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- Constant Field
- Vertex Position
- To Do List

August 5, 2002 Ring Coolers Meeting

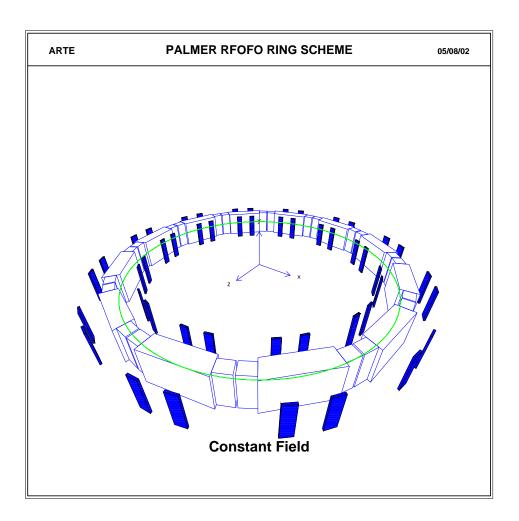
#### Constant Field

• The main goal is to test the RFOFO's code and geometry in GEANT by switching on and off: Wedges, RF's and physics

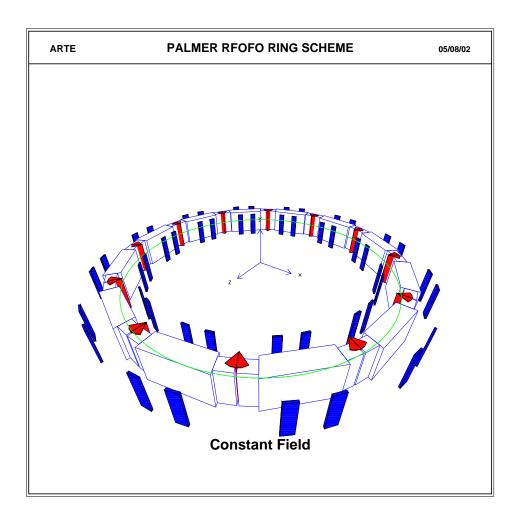
#### • Brute force:

- Applied a constant field (0.1278 Tesla) perpendicular to the ring
- Applied  $\mu^+$  (205 MeV) started at 532 cm in z direction
- Taking out RF's and Wedges from the ring physically
- Put back Wedges of vacuum instead of liquid hydrogen
- Put back RF's with no gradient

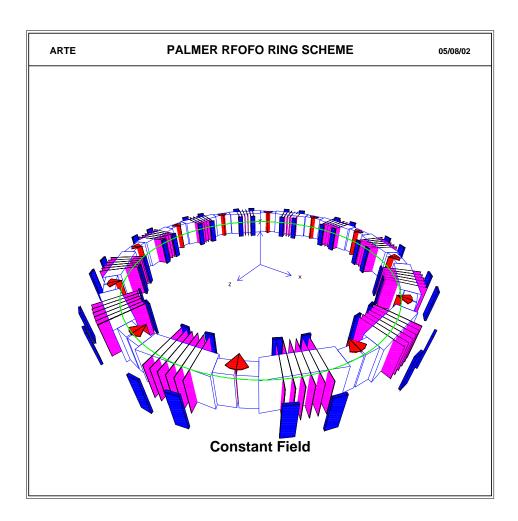
# Closed Orbit with no RF and Wedges



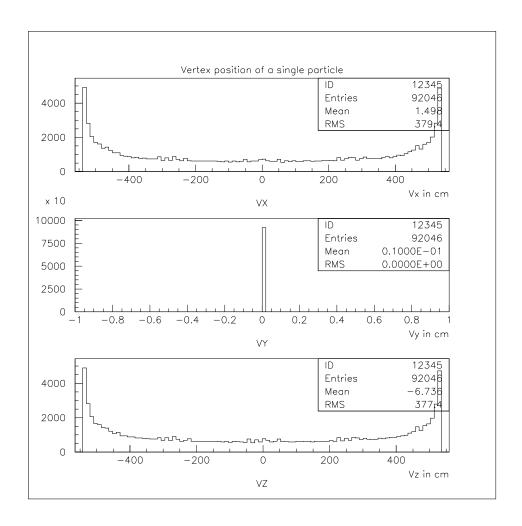
## Closed Orbit with Wedges of vacuum



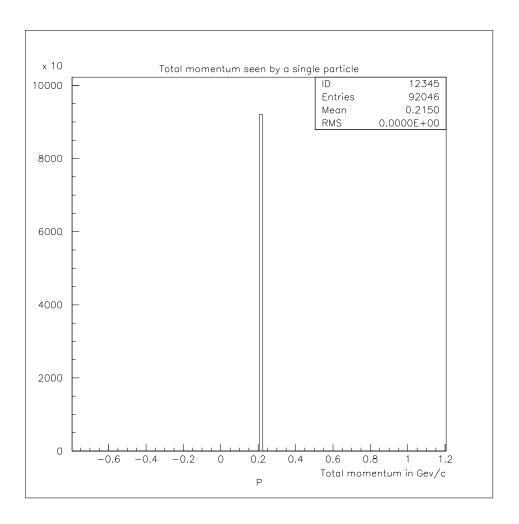
# Wedges of vacuum and no Gradient



#### Vertex Position of Closed Orbit



## Total Momentum of Closed Orbit



#### To Do List

- Applied Solenoid Field into the Ring
  - Read in Fernow's solenoid field
  - Read in Cremaldi's solenoid field
  - Read in Summers' solenoid field
- Testing the system with solenoid only...